

ABSTRACT

Sub A17

A circuit, apparatus and method for providing a cross-coupled load with
5 built-in current mirrors are provided in embodiments of the present invention. In
an embodiment of the present invention, a circuit comprises a first node for
providing a first variable voltage and a second node for providing a second
variable voltage. In an embodiment of the present invention, a clock signal
generates the first variable and second variable voltages. A first transistor is
10 coupled to the first node and provides a first current responsive to a first control
voltage being applied to the first transistor gate. A second transistor is coupled to
the second node and provides a second current responsive to a second control
voltage being applied to the second transistor gate. The first and second
transistors operate in a saturation region. A first control circuit is coupled to the
15 first transistor gate and the second node. The first control circuit provides the first
control voltage responsive to the first variable voltage. A second control circuit is
coupled to the second transistor gate and the first node. The second control
circuit provides the second control voltage responsive to the second variable
voltage. In an embodiment of the present invention, the first and second currents
20 are used to provide a duty cycle correction signal.

10085782.022602